

### **REMARKS**

Applicants have carefully reviewed this Application in light of the Office Action mailed December 2, 2005. Claims 16-20 are pending in this Application. Claims 1-15 have been cancelled due to an election/restriction requirement, and Claims 16-20 were rejected under 35 U.S.C. § 103(a). Claim 16 has been amended to further define various features of Applicants' invention. Applicants respectfully request reconsideration and favorable action in this case.

#### **Election/Restriction Requirement**

In the Office Action mailed December 2, 2005, the Examiner set forth an election restriction requirement of the following claimed inventions:

- I. Claims 1-7, drawn to a method of routing an electrical trace, classified in class 29, subclass 830;
- II. Claims 8-15, drawn to a printed circuit board, classified in class 361, subclass 794;
- III. Claims 16-20, drawn to an information handling system, classified in class 361, subclass 764.

During a telephone conversation between Applicants' attorney and Examiner Dunghai Nguyen on October 18, 2005, Applicants made a provisional election to prosecute the invention of Group III, Claims 16-20. Applicants hereby confirm that election and cancel Claims 1-15 without prejudice or disclaimer. The cancelled claims are subject to the filing of a divisional application without prejudice.

#### **Claim Objection**

Claim 1 was objected to because of informalities. Applicants cancelled Claim 1 pursuant to the election/restriction requirement set forth by the Examiner in the Office Action mailed December 2, 2005.

#### **Rejections under 35 U.S.C. § 103**

Claims 16-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,640,048 issued to Erich Selna ("Selna") in view of U.S. Patent No. 6,236,572

issued to Abeye Teshome et al. ("Teshome"). Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, do not render the claimed embodiment of the invention obvious.

In order to establish a *prima facie* case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). The Applicants submit that the proposed Selna-Teshome combination fails to teach, disclose or suggest all of the limitations cited in amended Claim 16.

Claim 16, as amended, recites:

An information handling system comprising:  
a processor;  
a memory communicatively coupled to the processor;  
and  
a circuit board communicatively coupled to the processor, the circuit board comprising:  
a voltage plane forming a first layer of the circuit board, the voltage plane operable to provide an electrical current;  
a ground plane forming a second layer of the circuit board, the ground plane operable to provide a ground for the electrical current;  
the electrical trace routed over a portion of the circuit board, the electrical trace including a first path and a second path such that the first path references the ground plane and the second path references the voltage plane whereby the first path is substantially similar to the second path; and  
the first path electrically coupled to the second path at each of the ends of the paths.

The proposed Selna-Teshome combination fails to teach, disclose or suggest this combination of limitations. For example, the proposed Selna-Teshome combination fails to disclose, teach or suggest "the electrical trace routed over a portion of the circuit board, the electrical trace including a first path and a second path such that the first path references the ground plane and the second path references the voltage plane whereby the first path is substantially similar to the second path" as specifically recited in Claim 16. The Examiner states in the Office Action that this limitation is disclosed at Fig. 3, elements 8C, 10C and 6C of Selna. (See Office Action, pages 4-5: "the electrical trace . . . including first and second paths (8C, 10C) such that the first path references the ground plane and the second path

references the voltage plane whereby . . . the first path [is] electrically coupled to the second path at the ends of each of the paths (the electrical connection by conductor filled in vias 6C”).

However, contrary to the Examiner’s allegations, Fig. 3 does not indicate that either of the signal paths 8C or 10C *reference* either the  $V_{DD}$  plane 260 or the  $V_{SS}$  plane 200, as recited in Claim 16. Instead, Fig. 3 shows that paths 8C and 10C are both electrically coupled to  $V_{DD}$  plane 260 by vias 6C.  $V_{SS}$  plane 200 is electrically insulated from vias 6C, and therefore is also electrically isolated from paths 8C and 10C. Since paths 8C and 10C are electrically connected to  $V_{DD}$  plane 260, neither can be said to “reference” the  $V_{DD}$  plane 260 or the  $V_{SS}$  plane 200 as that term is understood in the art. (*See Application*, paragraph [0038]: “each signal plane 103, 104 is set or placed closer to either voltage plane 101 or ground plane 102 and, as such, is said to ‘reference’ a particular plane.”).

For at least these reasons, the proposed Selna-Teshome combination fails to teach, disclose or suggest the recited limitations and therefore, cannot render obvious Claim 16.

Given that Claims 17-20 depend from Claim 16, Applicants submit that Claims 17-20 are allowable. As such, Applicants respectfully request that the Examiner reconsider and withdraw the rejections under 35 U.S.C. § 103(a) and allow Claims 16-20.

**CONCLUSION**

Applicants have made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of Claims 16-20.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 02-0383 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2548.

Respectfully submitted,  
BAKER BOTTS L.L.P.  
Attorney for Applicants



Brian E. Szymczak  
Reg. No. 47,120

Date: 3/01/2006

**SEND CORRESPONDENCE TO:**

BAKER BOTTS L.L.P.

CUSTOMER NO. **23640**

512.322.2548

512.322.8383 (fax)